REMARKS

The present application was filed on July 15, 2003, with claims 1-19. Claims 20 and 21 were added in a previous amendment. Claims 1-21 are currently pending. Claims 1 and 18-21 are the independent claims.

Claims 20 and 21 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-11 and 14-19 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0012141 (hereinafter "Gerrevink").

Claims 12 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gerrevink in view of U.S. Patent No. 7,065,036 (hereinafter "Ryan").

Claims 13 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gerrevink in view of U.S. Patent No. 6,498,667 (hereinafter "Masucci").

Applicants respectfully request reconsideration of the present application in view of the amendments above and remarks below.

In formulating the §101 rejection of claims 20 and 21, the Examiner asserts that "a computer-readable medium encoded with one or more data structures" is non-statutory subject matter "because it does not disclose 'executable' computer instructions." Applicants respectfully disagree and note that MPEP §2106.01 specifically indicates that "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components [of the computer which reads the medium] which permit the data structure's functionality to be realized, and is thus statutory."

Indeed, the Federal Circuit has held that a claim directed to a data structure, rather than executable computer instructions, stored on a computer-readable medium in fact defines statutory subject matter, noting that the claimed "data structures provide tangible benefits: data stored in accordance with the claimed data structures are more easily accessed, stored, and erased. . . . In short, [the claimed] data structures are physical entities that provide increased efficiency in computer operation." *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

As noted in the present specification at page 6, lines 8-11, illustrative embodiments of the claimed data structures "provide a particularly efficient mechanism for specifying a wide variety of different types of traffic, without undue limitation as to number of protocols, size or arrival time

distribution models, parameter sequences, or other features." Thus, rather than being "non-statutory subject matter because [they do] not disclose executable programs," as the Examiner contends, claims 20 and 21 recite statutory subject matter, namely, a computer-readable medium encoded with one or more data structures which provide tangible benefits, such as increased efficiency.

With regard to the §102(e) rejection of claim 1, Applicants initially note that MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

In formulating the rejection of claim 1, the Examiner contends that the limitation of claim 1 directed to associating each of the traffic flows with at least one of a plurality of output interfaces of the traffic generator is met by paragraphs [0031], [0052] and [0077] of Gerrevink, which the Examiner characterizes as teaching that "a set of addresses is programmed to be routed to that output port, meaning that a plurality of traffic streams are associated with each output port." Applicants respectfully submit that the output ports described in the relied-upon portions of Gerrevink are not output interfaces of a traffic generator, as recited in claim 1, but rather output ports of a device under test. See, e.g., Gerrevink at [0031] ("multiple output ports of the SUT") and at [0052] ("each output port of the equipment under test").

Accordingly, Gerrevink fails to disclose the limitation of claim 1 directed to associating each of the traffic flows with at least one of a plurality of output interfaces of the traffic generator. Instead, Gerrevink teaches an arrangement wherein a traffic generator has a single output interface connected to a single input port of a device under test. The portions of Gerrevink relied upon by the Examiner merely teach that the device under test may forward traffic received from the single output interface of the traffic generator to multiple output ports of the device under test.

As described in Gerrevink at [0037], with reference to FIG. 1, "[a]n equipment specific interface 104 may optionally be provided to interconnect the traffic generator 103 to the equipment under test 106. . . . The equipment specific interface 104 functions to provide the physical interconnection as well as the protocol conversion necessary to enable the traffic generator output to

be presented to the equipment under test 106." See also Gerrevink at [0070] ("Each traffic source needs to be able to send packets to the input port of a router with addresses configured so that the packets are forwarded to a large number of different ports.")

Notwithstanding the above traversal, Applicants have amended claim 1 solely in order to expedite allowance by clarifying the claimed subject matter. More specifically, claim 1 has been amended to recite a limitation wherein at least two of the plurality of output interfaces each has one or more of the traffic flows associated therewith and at least one of the plurality of output interfaces has two or more of the traffic flows associated therewith. Support for this amendment may be found in FIG. 2, in which each of output interfaces 202-1, 202-2 and 202-3 have one or more traffic flows associated therewith and output interface 202-1 has three traffic flows associated therewith.

Independent claims 18 and 19 have been amended in a manner similar to independent claim 1 and are thus believed to be patentable for at least the reasons identified above with regard to claim 1.

Independent claims 20 and 21 are each directed to data structures comprising information characterizing one or more traffic flows associated with at least one traffic generator, represented as a string which includes a global header followed by one or more frames each having an associated frame header. Although the Examiner fails to expressly address this limitation in formulating the rejections of independent claims 20 and 21, the Examiner argues that a similar limitation found in dependent claim 11 is met by paragraph [0036] of Gerrevink. Applicants respectfully submit that the relied-upon portion of Gerrevink merely discloses that an interdeparture queue "functions to store data representative at least one selected traffic model, comprising both a pattern of data traffic and a traffic load," and as such fails to disclose the arrangement recited in each of claims 20 and 21.

Claim 20 includes a further limitation wherein the global header comprises a clock speed field indicating a clock speed of an associated output interface. In an illustrative embodiment described in the specification at, for example, page 11, lines 26-28, the clock speed field indicates the clock rate of the physical line connection or other output interface for which the traffic is generated.

The Examiner concedes that the recited clock speed field is not disclosed by Gerrevink. Instead, the Examiner contends that the recited clock speed field is taught by Ryan at column 6, lines 63-65. The relied-upon portion of Ryan describes the generation of a physical layer convergence protocol (PLCP) header field within an OFDM (orthogonal division frequency multiplexing) packet

as used in an IEEE 802.11a WLAN (wireless local area network). Specifically, Ryan indicates that such a header includes a DATARATE parameter which "describes the bit rate at which the PLCP shall transmit the PLCP service data unit (PDSU)."

Applicants respectfully note that a bit rate at which a data unit is transmitted may differ from the clock speed of an associated output interface due to, for example, limitations of a transmission medium to which the output interface is operatively coupled. Accordingly, Applicants respectfully submit that Ryan's disclosure of a PLCP header within an OFDM packet including a parameter which "describes the bit rate at which the PLCP shall transmit the PLCP service data unit (PDSU)" fails to teach or suggest the limitation of claim 20 directed to a data structure comprising information characterizing one or more traffic flows associated with at least one traffic generator, represented as a string which includes a global header comprising a clock speed field indicating a clock speed of an associated output interface.

Moreover, even if one could combine Gerrevink with Ryan so as to reach the limitations of claim 20, the Examiner has failed to provide a cogent motivation for doing so. The Examiner states the motivation for the proposed combination "is that it increases the reliability and efficiency of the traffic generator." Applicants respectfully submit that this statement is a conclusory statement of the sort ruled insufficient by both the Federal Circuit and the U.S. Supreme Court. See *KSR v. Teleflex*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (U.S., Apr. 30, 2007), quoting *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.").

Claim 21 includes a further limitation wherein a given one of the frame headers comprises a timing field indicating a time gap in clock cycles between the corresponding frame and a previous frame. In an illustrative embodiment described in the specification at, for example, page 12, lines 6-9, the recited timing field may not only indicate the time gap in clock cycles between the current frame and the previous frame but also, for the first frame header, may also indicate the number of cycles, measured from the start of a simulation or other traffic generation process, after which the first frame is to be sent over the output interface.

The Examiner concedes that the recited timing field is not disclosed by Gerrevink. Instead, the Examiner contends that the recited timing field is taught by Masucci at column 10, lines 30-34,

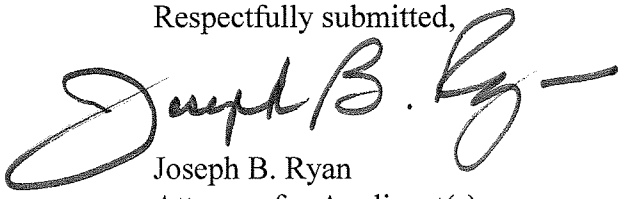
which states that a timeslot header of an upstream TDMA frame includes a 16-bit guard time (GT). This guard time is not a timing field indicating a time gap in clock cycles between the corresponding frame and a previous frame. Thus, Applicants respectfully submit that Masucci fails to teach or suggest the limitation of claim 21 directed to a data structure comprising information characterizing one or more traffic flows associated with at least one traffic generator, represented as a string including a frame header comprising a timing field indicating a time gap in clock cycles between the corresponding frame and a previous frame.

Moreover, even if one could combine the guard time field taught by Masucci with the teachings of Gerrevink so as to reach the limitations of claim 21, the Examiner has failed to provide a cogent motivation for doing so. The Examiner states the motivation for the proposed combination "is that it allows the apparatus to avoid overlapping between frames." However, the timing field recited in claim 21 is not used to avoid overlapping between frames, but rather for use in conjunction with a packet time arrival model. For example, an illustrative embodiment may use the timing field in generating a simulation of burst arrival, when a certain number of packets arrive substantially back-to-back, that is, one after another without any significant intervening time between arriving packets, as discussed in the present specification at, for example, page 1, line 28, to page 2, line 2.

Dependent claims 2-18 are believed to be patentable for at least the reasons identified above with regard to claim 1. Additionally, one or more of these claims defines separately patentable subject matter. For example, dependent claims 11, 12 and 13 include limitations similar to limitations discussed above with regard to independent claims 20 and 21, respectively, and are thus believed patentable for at least the reasons identified above with regard to claims 20 and 21.

In view of the foregoing, claims 1-21 as amended are believed to be in condition for allowance.

Respectfully submitted,



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